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A Building as a Catalyst for Change: the New British Library Centre for Conservation

by HELEN SHENTON

INTRODUCTION

The new [Centre for Conservation](#) at the British Library (BLCC) opened in London this year. This 2600 square metre, purpose-built Centre is connected to the main British Library by a new public terrace and is adjacent to the new St Pancras Eurostar station opening in November 2007.

The Centre houses state-of-the-art book conservation studios and sound preservation studios, together with facilities for an extensive training and public outreach programme. The public programme includes a permanent, free exhibition and education suite at the entrance to the new Centre, linked to the rotation of iconic collection items within the BL's Treasures Gallery. There are to be free, behind-the-scenes tours of the conservation studios for the public as well as demonstrations, workshops and talks. The professional outreach includes partnering with the University of the Arts on setting up a new two-year Foundation Degree in Book Conservation, setting up funded internships for book and sound preservation, and steps to furthering the BL in conservation research. From the beginning, there were three main, intertwined elements at the core of the Centre for Conservation project, namely construction, fund-raising and a 'change programme'.

The paper describes the construction project and highlights features such as the 'floating' sound studios, the natural north light that bathes the majority of the conservation studios and describes how the needs of visitors and circulation were anticipated. Secondly it describes the nature of the fund-raising for the €19.65 (£13.25) million project, which was the first such capital fund-raising project undertaken by the BL. The money has been raised from a combination of public and private sources. The mixture of conservation, professional training and public access has been key to the success in raising the funds. Thirdly, the paper describes how the impetus for providing appropriate accommodation for those areas not incorporated into the St Pancras building in the late 1990s, was used as a catalyst for change. The space was designed to engender different ways of working and the very process of developing the project was used to develop people by working in different ways. This is a modernisation and 'cultural change' project, whereby the challenge has been to keep the best of the old (the artisanship, hand craft skills and technical expertise) and create the best of the new (updating conservation techniques, developing new skills commensurate with the needs of the collections, evolving organisational changes).

THE CONCEPT

The British Library completed the move into its current flag ship headquarters at St Pancras in 1998. The Library converged on the St Pancras site from a number of sites across London - from the British Museum in Bloomsbury, from South Kensington where the Sound Archive was housed, from Blackfriars where the India Office Library and Archive was housed, from Holborn where the Science Reference and Information Service was housed. The building, designed by Sir Colin St John Wilson, houses 11 reading rooms, exhibition galleries, cafes and a bookshop, entered via a cathedral-like entrance hall in which the Kings Library Tower soars as if driving up from the deep basements, in which some 6 million volumes are stored.



Figure 1. The British Library in the foreground with St. Pancras station behind

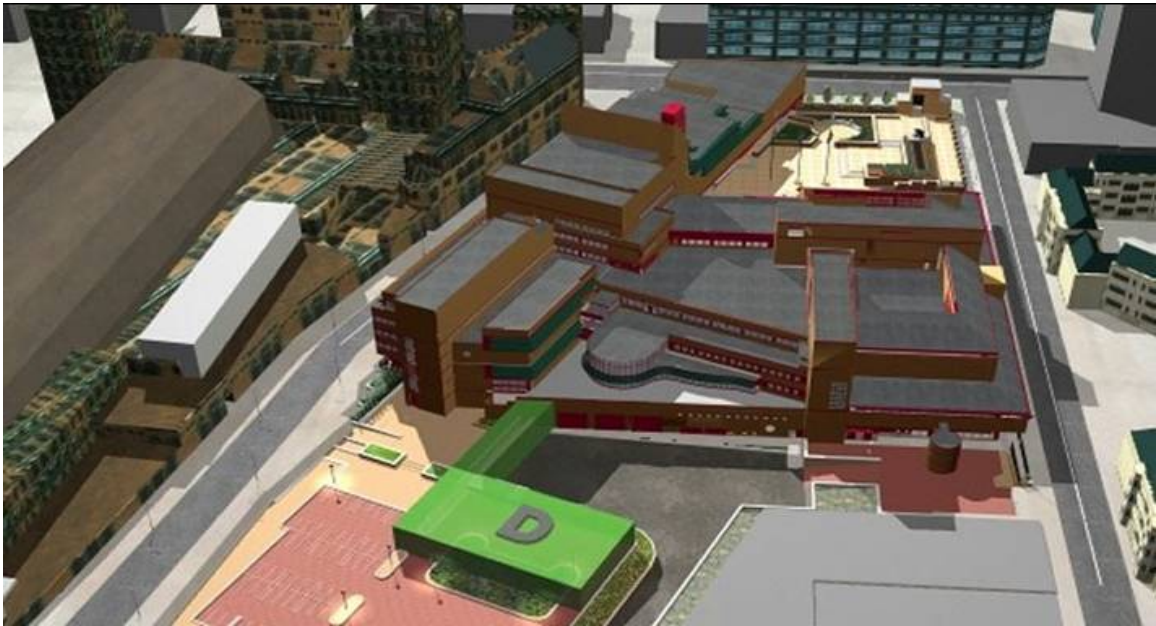


Figure 2. Site of the Centre for Conservation behind the main building

Part of the Conservation Department moved into the St Pancras building in 1998, mainly those studios with an emphasis on Paper Conservation that had been located in Blackfriars. Due to restrictions on space and on funding, there was not sufficient accommodation for everyone. Therefore, Book Conservation remained in workshops on the British Museum site – the only part of the British Library to remain on the British Museum site – and the Sound Archive Technical Section remained in Islington in north London. Neither facilities were to an appropriate standard and were the highest priority to relocate to the St Pancras site. Furthermore, the lease for the British Museum accommodation was due to expire in 2007.

The project that became the British Library Centre for Conservation started in 1999. There were four main elements behind the concept, namely studio accommodation, public access, training and research. The vision was to:

- create state-of-the-art book conservation studios and sound archive technical studios collocated for the first time together with the collections;
- incorporate public access and educational opportunities to engage the interested public as a fundamental part of the design;
- create training and educational facilities to help replenish the profession of conservation;
- apply scientific research to the conservation and curatorial interpretation of library holdings.

Book conservation and sound preservation studios

In addition to making studios for about 50 book conservators, the opportunity was taken to focus on creating a Centre of Excellence for Book Conservation. Therefore, book-related elements already on the St Pancras site were incorporated, including better facilities for preventive conservation processes (such as archival phase boxing), oriental book conservation and conservators funded publicly by the Adopt-a-Book scheme ([Humphrey, 2007](#)). The new facilities enabled the technical operations of the British Library Sound Archive to provide archival-standard preservation-copying and professional re-mastering facilities for recorded sound items.

Other pressing accommodation priorities were also fulfilled, for example, an area for marshalling exhibition items going out of the Library on loan and a quarantine area where possible infestation of incoming material could be treated without putting other areas of the library at risk of contamination. A fundamental requirement for the conservation studios was natural, north light. Another key requirement was to separate out wet and dry processes, clean and dirty processes, quiet and noisy activities. A fundamental requirement for the sound preservation technical studios was very high acoustic specifications, especially as the site is above an underground line.

Public Access

Public programmes of visits, demonstrations and the explanation of conservation were part of the basic concept of the Centre for Conservation. Behind-the-scenes tours of the conservation studios have been designed into the layout of the conservation studios from the beginning. They build on a known interest of the public to 'see people doing conservation', gained from the [Adopt-a-Book](#) *Meet your Book* events. The circulation of visitors, the security of the collections and minimising disruption for conservators were taken into account during the design.



Figure 3. The main Book Conservation studios, around which there are weekly tours for the public



Figure 4. Demonstrating sewing a book at a travelling version of the exhibition



Figure 5. Visitors around the new Conservation studios

There is a programme of demonstrations, workshops and talks for the public on topics such as caring for photographs, family history archive days, as well as conservation advice clinics at weekends.

A key feature of the public programme is a permanent, free exhibition and education suite at the entrance to the new Centre. Entitled '[Conservation Uncovered](#)'. The exhibition not only explains conservation of the BL's collections, but using interactive displays, it invites the visitor to restore, for example, a 110 year-old speech by Florence Nightingale and compare it to the BL sound archivists' version, or to go through options for conserving a 19th-century printed book. It is also linked to the rotation of iconic collection items within the BL's main Treasures Gallery.

The exhibition will be linked to the programme of rotation of treasures in the main BL Ritblat Gallery. When, for example, the Lindisfarne Gospels are removed from display for six months out of every two years for conservation reasons, the visitor will be alerted to the permanent exhibition that explains about conservation ([Shenton, 2006](#)). The 'Conservation Uncovered' exhibition will become part of the daily public tours of the British Library building. The exhibition shows videos of the conservation of key world heritage items such as the Diamond Sutra, the world's earliest complete survival of a dated printed book, made in AD 868. A web micro site has been developed about the Centre, which includes [video clips](#) of the conservation of such BL items.





Figures 6, 7, 8. 'Conservation Uncovered': permanent exhibition in the entrance to the Centre with interactive displays on conserving books and sound

Training and Development

The third key element in the Centre is the training and development of both new professionals and current staff. The professional outreach includes partnering with the University of the Arts on setting up a new two-year Foundation Degree in Book Conservation and setting up funded internships for book and sound preservation. The programme of training is in response to a much-talked about 'crisis' in book conservation training in the UK,

with six out of eight courses having closed over the past five years. It is also a response of self-interest; when analysed in 2004, 19% of staff in the Conservation Department were due to retire in the next five years, rising to 25% of book conservation staff. Many of these conservators have decades of experience and were trained in a way unavailable today.

The first Head of Conservation training in a UK library or archive was created with a remit not only to address the development of the current 80 conservators at the British Library, but also to address the issue of book conservation training in the UK and define what part of that training the BL might provide. Research was undertaken to determine whether there is a need for the conservation of book collections in the future, and if so, whether there is a need for book conservators. An international questionnaire demonstrated that there is perceived to be a need for book conservation and therefore for training, at current if not increased levels. An interesting finding was that respondents thought that in the light of digital developments, the value of the book as artefact will *increase* rather than *decrease*, with a commensurate increased need for skills to conserve books as artefacts ([Atkinson, 2004](#)).

The need to replenish skilled book conservators was therefore not confined to the BL but was considered to be a national and international need. The key outstanding need was for training in practical book conservation skills. The BL analysed the different ways it might help replenish the national skills base, ranging from ‘advanced apprenticeships’ to PhDs. A new type of two-year degree course had recently been established in the UK, whereby a university runs a course in a subject where skills are sought by an industry (such as in ship building or nursing) and industry partners offer placements for part of the course.

In response to the findings of the research, the BL is working with Camberwell College of Art (part of the University of the Arts) on setting up a two-year [Foundation Degree in Book Conservation](#). The BL will be one of the partner institutions that will contribute towards the practical element of the course in the second year of the course, and has designated studio space in the new Centre for five students. The two-year Foundation degree can be continued to BA or MA level at Camberwell. In addition, a programme of British Library internships with funded bursaries will build on the modest *ad hoc* internships and placements accommodated currently. These internships are for those who have already completed a course and need to consolidate their skills. The first funded internship of K£10 from the Heritage Lottery Fund for Book Conservation is underway with another three about to start. The BL is addressing the growing need for specialists in the sound archive field by offering internships that combine audio training and project work. The flexible programme caters for those seeking to develop in an intermediate or advanced level. Currently for UK nationals only, a future aim is to enlarge this for overseas internships.

Professional events are part of the programme for the new Centre; for example, a conference is being held this year on “Unlocking Audio: Sharing Experience of Mass Digitisation”.

Applied Conservation Research

The British Library identified the need for conservation research applicable to caring for the collections in libraries and archives in the UK and internationally. The first Head of Conservation Research in a UK library or archive was appointed in 2003. In 2004 *A Conservation Research Strategy for the British Library* was produced ([Knight, 2004](#)) and the BL attracted funding from the Andrew W. Mellon Foundation for an international roundtable discussion to produce a peer-agreed strategic framework of priorities for conservation research in the library and archive community in the UK over the next five years. ([Longer Life Collections, 2004](#)). The themes that emerged were:

- The ‘life cycle of the collections’, including life-cycle prediction, natural ageing of materials and the evaluation of preservation strategies.
- The effects of the storage environment, including the selection of the optimum environment for different materials.
- The non-destructive methods for assessing damage to materials.

The emphasis on applied conservation research and the collaborative, outward-looking approach reinforces many BL corporate strategies, particularly the promotion of the public understanding of science and the importance of science and technology in the library’s collections. On a practical level, examples of the collaborative approach

are illustrated by the involvement with the EU-funded [SurveNIR](#) project to develop a near infrared tool for measuring the deterioration of paper which can be used in future condition surveys, and the EU project [InkCor](#) investigating stabilisation of iron gall ink corrosion on paper text blocks, which is a major problem in library and archive collections.

The BL was awarded a grant by the Andrew W. Mellon Foundation for two projects to be run over three years. The [first project](#) looks at the condition of identical books in different nationally significant libraries.¹ In the [second project](#), volatile organic compounds (VOCs) given off by books will be analysed.² Individual, collection-based projects are exemplified by the use of MuSiS for multi-spectral imaging to investigate ink and scribal hands for the major Codex Sinaiticus Digitisation project ([McKendrick, 2006](#)).³

The model for applied conservation research at the British Library is one of distributed, out-sourced collaboration ([Shenton, 2006](#)). So, the scientific analysis for the Mellon-funded projects is being undertaken by universities in England and Scotland. The concept for the BL Conservation Centre was to have examination facilities that are accessible for all conservators, rather than large laboratories with very expensive equipment ([Field & Shenton, 2006](#)).

DESIGN, LAYOUT AND CONSTRUCTION

The construction project was 'two-stage design and build', with the primary contractor Sir Robert McAlpine, architects Long & Kentish, engineers Arup and project consultants Drivers Jonas. The BL Centre for Conservation is a 2600 square metre, three-storey building on a free-hold site to the north of the main St Pancras building. Part of the architectural challenge was to create a building with its own identity whilst also being an integral part of the British Library site. This was achieved by joining the two buildings by a new public terrace at the first floor level, thereby not only giving the Centre its own 'front door' but also creating a new, very attractive public space. By being at first floor level, the terrace extension also covered over the unsightly loading bay. The terrace is used on a daily basis as part of the restaurant and can be adapted for functions. There is another covered corridor joining the two buildings at a lower level by which collection items can be securely transported.

The terrace has been designed so that, in time, there is the possibility of joining the BL to the new neighbouring Eurostar Station due to open as the main railway terminus to Paris and Brussels in mid-November 2007. The Mayor of London has a vision to create an alternative pedestrian route joining the three railway stations of Kings Cross, St Pancras and Euston to avoid the motorway-sized Euston Road. The British Library sits between the three stations and on the Euston Road. Whilst there are significant security issues to be considered, the fact that potential future development of a walkway was thought about epitomises the thoughtfulness of the architectural design. Furthermore, the Conservation Centre is the first building on the site to the north of the main library building. In time, it is anticipated other projects will be built on the site. Therefore, the architectural design aimed to ensure that this building did not prejudice or compromise other projects into the future.

The British Library laid a great emphasis on design and quality of the building, from the tendering process for the primary contractors for the two-stage design and build contract. It attracted the attention of [CABE](#) (Commission for Architecture and the Built Environment), which actively promotes high design standards in public buildings.



Figure 9. New public terrace joining the main building and the Centre with the new Eurostar station visible behind



Figure 10. The new Centre for Conservation with saw-toothed roof

The three-storey, bespoke building was a complex construction project, so much so, that the project manager ruefully commented that “usually a building gets more straightforward as you get above the ground floor; this one keeps getting more complicated”. The environmental specifications are 21 (± 2) degrees centigrade and 50% (+5%) relative humidity. Construction started on site in August 2005 and was finished on time and on budget. The building was occupied by May 2007.

In response to the key requirement for the main studios to be lit by north light, the majority of the studio space has been designed on the first floor with top light provided by a glazed saw-tooth roof. This makes the building somewhat of an ‘upside down’ building, in that the majority of the accommodation is on the top floor. The large studio on this floor (42 \times 18 metres) accommodates 48 conservators, with groups of eight benches around shared equipment. This was to delineate the different teams, to address the circulation of visitors on tours and help with acoustics. The most commonly heard reaction from visitors on entering these studios bathed in top light, is ‘wow’.

In order to separate out wet and dry treatments, the aqueous conservation processes are separated into an adjoining area along one wall with largely glass partitions. Solvent treatments are carried out in a separate room with extraction in fume cupboards, and there is a separate room for leaf casting.

In early discussions about having tours by visitors, the conservators had been concerned about feeling as though they were ‘in a zoo’. To address these concerns, the studios cannot be looked into directly from the public terrace. Panelled in American oak that will turn silver in time, there are windows in the exterior walls overlooking the terrace but they have been offset to negate any ‘zoo-like’ feeling. There is a distinct space for gold tooling and finishing. Tooling books in gold leaf is very visual and popular with visitors. The BL has some of the few people in the country skilled in finishing and gold tooling. The studio layout and benches were designed to incorporate demonstrations.



Figure 11. Separate gold finishing studios

Also on the top floor is a flexible studio (18 × 6 metres) for book care processes and for demonstrations, for both the public (such as caring for photographs) and for staff (such as salvage training using wet books). The furniture is mobile and much lighter than the robust beech benches in the main studio to enable different configurations.

On the middle floor there is a specially designed area for archival box-making machines (that can also be used for mount-cutting and cradle-making for displaying books), adjacent to materials storage. An automated inventory system for materials was designed ahead of occupation of the new premises. To fulfil the requirement of separating different types of activity, there are two 'quiet' meeting rooms, a scientific examination facility and a workshop for dusty and dirty work, as well as a quarantine room adjacent to the loading bay.

The lower floor comprises mainly 'floating' studios to achieve the very high acoustic specification for audio preservation. The sound studios are built using block work, thermal and acoustic insulation and sit on reinforced concrete slabs 'floating' on acoustically isolating rubber pads some 600 mm thick. In addition to the ten sound transfer studios and a recording studio, there is storage for the many recording machines (many becoming obsolete) that the sound archive need to maintain and use. The studios are equipped with high performance machines for carrying out the studio's main focus of audio transfer. Analogue-to-digital converters aim to guarantee historic recordings are preserved but not modified and a precision-built audio analyser is used to test working equipment and ensure it meets exacting engineering standards set by professionals ([Ranft, 2007](#)). The studios prepare audio excerpts for playback in BL exhibitions and sounds for the BL website. One studio is used specifically for live recording of oral history interviews and lectures for the [BL's podcast programme](#). A sorting area in the Technical Services office prepares collection items for copying and is equipped with a laboratory oven and bath for disc cleaning.



Figure 12. 'Floating' sound studio

FUNDING

The second inextricably interwoven aspect of the BLCC project was fund-raising. The £13.25 (€19.65) million for the project was raised from a combination of public and private sources. The core funding underpinning the beginning of the project was raised from part of the sale of one of the buildings vacated when the British Library moved to its new headquarters at St Pancras in 1998.

In addition to this public funding, there was a substantial fund-raising campaign, which was the first capital fund-raising project for the British Library. Led by the BL's Development Office, supported by and involving the Chairman and the BL Board, the Chief Executive, the BLCC Project Board and many future occupants of the new Centre, a variety of funding opportunities for potential donors was created. These ranged from naming opportunities for the different studios to sponsoring individual benches to funding one-year book conservation and sound preservation internships. So, several of the spaces are now named to reflect donor's contributions, for example, the exhibition and education suite is the 'Foyle Visitor and Learning Centre' and there is the 'Paccar Finishing Studio' and the 'Paccar Box-making Studio'. Some of the benches in the main book conservation studio are individually sponsored, for example, by the American Friends of the British Library and The Clothworkers' Foundation.

The integration of conservation, professional training and public access as part of the fundamental concept for the new Conservation Centre seems to have particularly appealed to donors and has been key to the success in raising the funds. The public programmes, such as the permanent exhibition and the conservation training were amongst the most popular elements with donors.

The project started without all the finances being in place and this underlines why the fund-raising was such an integral part of the project. The publicity for the fund-raising was key and the engagement with potential donors to see the work of the BL was critical. The [donors' generosity](#) and support are recognised in a plaque within the Exhibition and on the website.⁴

CHANGE PROGRAMME: PEOPLE, PROCESS AND PLACE

The British Library Centre for Conservation project has always been more than just a building project. The imperative to provide appropriate accommodation was used as a catalyst for a wide range of changes and improvements, ranging from cultural and organisational changes through to reviewing all the conservation treatments and materials that are currently employed. The change programme does not stop with the occupation of the building, but continues until it becomes fully integrated into 'business as usual'. As a modernisation and 'cultural change' project, the challenge has been to keep the best of the old (the artisanship, hand craft skills and technical expertise) and create the best of the new (updating techniques, developing new skills commensurate with the needs of the changing collections, working in different ways).

The space was designed to bring about different ways of working and the very process of developing the project was used to develop people by working in different ways. So, for example, there was a Senior Users Group representing the occupants of the new building which met more than a 100 times during the project. Each space was assigned a 'room champion' who was responsible for signing off the design of the space – none of the room champions had carried out this role before and virtually no-one had worked on a project of this scale and complexity.

The process of change management was defined as the intersection of 'people', 'process' and 'place'. A change manager was a key, core constituent of the BLCC project team and early in the project helped translate the vision for the building into work streams. These 36 work streams of modernisation included:

- conservation treatment review
- equipment, planned maintenance, materials, procurement
- skills audit, skills development
- environmental practices, facilities management

- documentation system, imaging
- work management and scheduling – bidding, estimating and programming
- disability friendliness
- quarantine process
- dissemination, knowledge transfer, profile-raising
- organisational change, culture, professionalism
- workflow and logistics.

Process

Each work stream was assigned an owner. The first work streams to be addressed were those that had a direct impact on the design of the building.

Change management techniques such as the RACI matrix which assigned roles and responsibilities (tasks are plotted against those Responsible, Accountable, Consulted and Informed) were used to manage the project and thereby introduced staff to new ways of managing and being accountable.

Team leaders were assigned responsibility for specific activities, for example, equipment. This involved making an inventory of all the equipment in the old, antiquated Bloomsbury workshops, determining which equipment would be refurbished ahead of the move into new studios and which would be disposed of, scheduling the refurbishment with minimum disruption to productivity, arranging an auction to sell surplus equipment, determining what new equipment was needed to improve the repertoire of conservation treatments whilst remaining within budget, and ensuring a maintenance regime of equipment. This involved over 1000 pieces of equipment and again introduced conservation staff to project management techniques previously unencountered and of future benefit.

Improvements were made to how the conservation resources (of c. 60,000 person hours) were programmed, partly by a new bidding and estimating system, and partly by the development of a documentation system (Preservation and Conservation Management System) linked to the BL's Integrated Library System for ordering, tracking, monitoring and recording conservation work.

People

There was substantial consultation about the design of, for example, benches. These U-shaped, 2.6 m × 2.6 m benches were not only a key building block around which the studios were designed, but are also the most important personal space and primary work location for most conservators. So mock-ups were made and tested *in situ* for how conservators worked, what is the optimum height and size, and how visitors would be able to gather around and see conservation being carried out on the benches.

The conservators came from a variety of different backgrounds, ranging from indentured apprenticeships within the bookbinding trade to overseas graduates with masters degrees in conservation. Specialisms ranged from binding to gold finishing to photographic conservation. There were variations in treatments across the different studios. As part of the BLCC project, a major review of all conservation treatments was carried out to ensure consistency and international best practice. As a result, some practices have been improved, equipment and materials changed and a series of workshops for staff developed (such as iron gall ink treatment) to ensure best conservation practice and identify skills enhancement. Some techniques were filmed for inclusion in the permanent exhibition.

Furthermore, a skills audit ensured that there is the best match of skills to care for the changing nature of the collections and to follow through the findings of the Conservation Treatment Review. This is part of an initiative to ensure conservators are fully prepared with new skills demanded by the BLCC (such as giving public tours) and that existing skills are refreshed.

In anticipation of its training role, the BL has offered National Vocational Qualifications (NVQ) level three for staff in 'training the trainers'. Customer service has been devised for those conservators hosting tours of visitors. There was a comprehensive introduction programme acquainting staff with the main BL building, history and working procedures on arrival into the new Centre.

The change management programme was integral to the project. It intertwined the numerous elements that needed modernising and improving to create a conservation department fit for addressing the needs of a 21st century, world class library. The impact of this type of all-embracing change cannot be underestimated. A wide variety of change management techniques were used to address the 'softer' issues of morale, uncertainty and insecurity. Techniques that proved successful include a traffic light system to gauge morale at the ends of meetings (green for enthusiastic and positive; amber for some concerns; red for major worries); a variety of communication methods, from newsletters to small feedback groups; celebratory events to mark major milestones (for example, a party was held in the empty Bloomsbury workshops after the auction of surplus equipment, which marked not only the end of book binding in those buildings since 1885, but also marked the end of the British Library being a tenant of the British Museum).

The change programme is far-reaching and ambitious. As part of the final project management stage and the UK Governments' [OGC Gateway Process](#) which has externally reviewed the project throughout, a 'benefits realisation plan' has been drawn up, defining the advantages of all the changes made. These are monitored on a regular basis to see if the benefits are materialising as anticipated.

Publicity, Profile-raising and Communication

Since the project had put so much emphasis on the 'change programme' centring on the people in the new building, so the emphasis on the publicity campaign to launch the Centre was put on people, by means of portraits of conservation and sound archive staff. A photographer took portraits of staff who were invited to bring an object or tool that summed up their work – for example, a spoke shave for a book conservator who pares leather; His Master's Voice's iconic dog 'Nipper' chosen by a sound archive technical services manager. The resulting set of about 35 slightly quirky, idiosyncratic portraits has been used in different ways for the publicity, for example in leaflets, in listings and on the websites.



Figure 13. Portrait used for publicity campaign

There will be six months between the full occupation of the building and the first 'behind the scenes' public tour, in order to give everyone the opportunity to settle in to the new Centre. The pilot tours will coincide with the architectural 'Open Day' weekend, when buildings around the UK are open to the public. This will be followed by a member of the royal family being given one of the first tours before officially opening the Centre. A second

tranche of publicity and awareness-raising is taking place in the autumn to coincide with the first tours for the public, with TV and radio coverage. A modest version of the exhibition is being developed for taking to other parts of the UK, using the interactive displays from the exhibition.

CONCLUSION

The British Library has a statutory duty to care for its collections. The collections range from Anglo-Saxon manuscripts to web sites. Conservation is one part of the spectrum of care from preventive preservation, digital preservation through to environmentally appropriate storage and copying sound recordings from obsolete formats. The aim throughout the nine-year project of the British Library Centre for Conservation is to be a centre of world class excellence in the book conservation and sound preservation. The process of change that those on the project went through is a major component in the attempt to create that vision.

Acknowledgements

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REFERENCES

- Atkinson, Catherine: *British Library study: The need for book conservation in the UK and Internationally*. London : british Library, 2004.
<http://www.bl.uk/aboutus/stratpolprog/ccare/introduction/training/webconservation.pdf>
- Field, C. and H. Shenton: evidence at *The Report of the House of Lords Science and Technology Sub-Committee's Inquiry into Science and Heritage*, published November 16, 2006.
<http://www.publications.parliament.uk/pa/ld200506/ldselect/ldsctech/256/256.pdf>
- Humphrey, V.: "The British Library Centre for Conservation". *Alexandria*, 19(2007)1, 23-35.
- Knight, B.: *A Conservation Research Strategy for the British Library*, 2004 (final version: 29/03/06).
<http://www.bl.uk/aboutus/stratpolprog/ccare/introduction/research/consresstratfinal.pdf>
- Longer Life Collections*. Mellon Foundation grant funds new conservation research, 2004.
<http://www.bl.uk/aboutus/stratpolprog/ccare/projects/mellonfoundation/index.html>
- McKendrick, Scot: *In a Monastery Library: Preserving Codex Sinaiticus and the Greek Written Heritage*. London : British Library, 2006, 48
- Ranft, R.: "Technically Speaking". *Playback*, (2007)38, 4-6. <http://www.bl.uk/collections/sound-archive/pdf/playback38.pdf>
- Shenton, H.: "Rotating the treasures on display at the British Library", *ICON News*, (London: Icon, July 2006): 28-30.
- Shenton, H.: "Conservation Research at the British Library", *Looking Forward to the Past: Science and Heritage*, London: Tate Modern, 2006. <http://www.srs.ac.uk/scienceandheritage/presentations/Shenton.pdf>

WEB SITES REFERRED TO IN THE TEXT

- Adopt-a-book. <http://adoptabook.bl.uk/>
- British Library's Audio downloads, podcasts and webcasts. <http://www.bl.uk/onlinegallery/whatson/downloads/>
- BLCC - British Library Centre for Conservation. <http://www.bl.uk/conservation>

BLCC - British Library Centre for Conservation donors.

<http://www.bl.uk/onlinegallery/whatson/blcc/donors.html>

CABE - Commission for Architecture and the Built Environment. <http://www.cabe.org.uk/>

'Conservation Uncovered'. <http://www.bl.uk/onlinegallery/whatson/blcc/permexhibition.html>

Foundation Degree in Book Conservation. <http://www.bl.uk/onlinegallery/whatson/blcc/profrtraining.html>

Identical Book Project - The condition of books in different nationally significant libraries.

<http://www.bl.uk/aboutus/stratpolprog/ccare/projects/books/>

InkCOR - Stabilisation of Iron Gall Ink Containing Paper. <http://www.infosrvr.nuk.uni-lj.si/jana/Inkcor/index.htm>

OGC - Office of Government Commerce Gateway process.

http://www.ogc.gov.uk/what_is_ogc_gateway_review.asp

Programme of British Library internships. <http://www.bl.uk/onlinegallery/whatson/blcc/profrtraining.html>

SurveNIR - Near-Infrared Tool for Collection Surveying. www.science4heritage.org/survenir/

Video clips of conservation of key world heritage items.

<http://www.bl.uk/onlinegallery/whatson/blcc/videos.html>

VOCs - Volatile Organic Compounds in Books Project.

<http://www.bl.uk/aboutus/stratpolprog/ccare/projects/voc/>

NOTES

¹ By analysing the condition of identical books published in the UK since the Copyright Act of 1710 in the six different copyright libraries in the UK and by using historic data about the storage environments, the project aims to enable more accurate prediction of the future condition of books.

² Paper emits a complex mixture of organic compounds as it ages, including volatile acids, which form the characteristic smell of old books. They contribute to the further degradation of paper, and it appears that the mix of compounds is characteristic of different papers, the degree and rate of degradation and the pathway by which the paper is degrading. By sampling the air in book stores and measuring the quantity of acid produced, this project aims to help libraries designing stores to minimise the rate of paper degradation and also give an early warning of when the level of acid in the books is reaching dangerous levels.

³ See also the press release, 11 March 2005 posted by Catriona Finlayson.

<http://www.bl.uk/news/2005/pressrelease20050311.html>

⁴ The British Library is extremely grateful to all those who have generously supported the project to date, which include: The Heritage Lottery Fund; The Wolfson Foundation; The Dorset Foundation; The Foyle Foundation; The Weston Family; PACCAR Inc.; The Friends of the British Library; The Headley Trust; The Clothworkers' Foundation; Sound Archive Trust; Dr Naim Angoor OBE and The Exilarch's Foundation; The American Trust for the British Library; The Annenberg Foundation; The PF Charitable Trust; The Rayne Foundation; The Mercers' Company; The BAND Trust; and The Bloomsbury Publishing Plc.